

REMARKS

Claims 1-15 were presented for examination.

Claims 1-15 were rejected.

Applicants are hereby amending claim 5 to correct grammatical and spelling errors, canceling claims 1-4 and 6-15, and adding new claims 16-34; all of the foregoing merely to distinctly claim their invention.

Applicants thank the Examiner for his time in conducting a telephone interview on April 6, 2004. Applicants believe that the time was spent effectively and significant progress was made. During the telephone interview, Applicants' attorney and the Examiner discussed claim 5 in light of McCutcheon and Nalwa, the two references cited in the current Office Action. Applicants' understanding is that agreement was reached and claim 5 is allowable over the two cited references. The issues discussed during the interview are summarized below.

Reconsideration of this application as amended, and allowance of all pending claims, claims 5 and 16-34, are hereby respectfully requested.

IDS

The Examiner requested another copy of a previously filed IDS, but it is not clear whether the Examiner is requesting the IDS filed 04/19/02 and/or the IDS filed 06/03/02. For the 04/19/02 IDS, Applicants believe the Examiner is referring to the IDS originally submitted on 04/16/02. This IDS is included with this response. The IDS filed 06/03/02 was submitted electronically. The electronic receipt is included with this response, as is Applicants' best reconstruction of the IDS from the electronic records. Applicants also bring to the Examiner's attention that another IDS was previously submitted on 2/12/04. Applicants respectfully request

the Examiner to consider these IDSs in the Examiner's next action and to telephone Applicants' attorney if any IDSs are still missing from the Examiner's records.

Formal Drawings

The Examiner requested formal drawings. Formal drawings are included with this response.

Claim 5 in light of McCutchen

Claim 5 was rejected under 35 U.S.C. § 102(e) as being anticipated by McCutchen. Applicants traverse the rejection of claim 5.

Claim 5 generally concerns a method for calibrating a multi-lens camera that captures overlapping images that are to be seamed together into a panorama. The claimed method uses a specific type of test pattern with identifiable indicia along its edge. McCutchen generally does not concern calibration or test patterns, and clearly does not disclose or suggest the specific method recited in claim 5.

In more detail, three sections of McCutchen are cited in the Office Action to support the rejection of claim 5. Applicants respectfully submit that none of these three sections stand for the propositions set forth in the Office Action. First, the Office Action states that element 446 of Fig. 32 is a test pattern. It is not. Fig. 32 is a top view of an optical mount (meaning, a type of physical support) for a camera system. Element 446 is simply where two faces of the mount meet, forming an edge. It is not a test pattern, as is required by claim 5.

Second, the Office Action states that col. 59 line 45 – col. 61 line 12 and col. 56 line 16 – col. 57 line 11 describe a calibration process for seaming two images together to form a

panorama. This is also not the case. The first passage describes another type of optical mount – the “criss cross lens mount.” This passage is primarily a description of the mechanical construction of this mount. Applicants could not find any discussion of calibration procedure for seaming images together. The second passage describes adjustments that can be made to account for temporal offsets (e.g., if a camera system is in motion). Again, Applicants could not find any discussion of calibration procedure for seaming images together.

Hence, Applicants respectfully submit that claim 5 is patentable over McCutchen.

Claim 5 in light of Nalwa

Claim 5 was rejected under 35 U.S.C. § 102(e) as being anticipated by Nalwa.

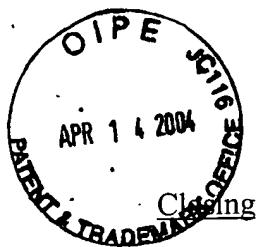
Applicants traverse the rejection of claim 5.

Nalwa concerns the calibration of a camera system to remove distortion within an image. It does not concern calibration for seaming two separate images together, let alone calibration using the specific technique recited in claim 5. In the introduction to the sections cited in the Office Action (Figs. 18-21), Nalwa makes clear that he is concerned with correcting distortion within an image, as he gives barrel distortion and rotational distortion as the only two examples of distortion he is concerned with. Col. 12 lines 24-42. Furthermore, in the example shown in Fig 20, the distorted column of dots occurs in the middle of one image, not on the border between two images (the two borders are represented by columns 210-214 and 216-218). Hence, Applicants respectfully submit that claim 5 is also patentable over Nalwa.

Claim 5 in light of McCutchen and Nalwa

Claim 5 was rejected under 35 U.S.C. § 103(a) in light of the combination of McCutchen and Nalwa. Applicants traverse the rejection of claim 5. As described above, neither Nalwa nor McCutchen concerns calibration for seaming two separate images together. Accordingly, the two references together also do not concern this topic. Therefore, Applicants respectfully submit that claim 5 is also patentable over the combination of McCutchen and Nalwa.

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Applicants are submitting herewith new claims 16-34 to provide the scope and breadth of claims coverage to which they believe they are entitled in view of the cited art. Applicants respectfully submit that claims 16-34 are patentable over both McCutchen and Nalwa for analogous reasons as the ones given above with respect to claim 5.

Applicants believe that the application is in condition for allowance of all claims herein, claims 5 and 16-34, and therefore an early Notice of Allowance is respectfully requested. If the Examiner believes that for any reason direct contact with Applicants' attorney would help advance the prosecution of this case to finality, the Examiner is invited to telephone the undersigned at the number given below.

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Respectfully submitted,

APR 19 2004

MICHAEL C. PARK et al. Technology Center 2600

Date: APRIL 12, 2004

By: Michael W. Farn

Michael W. Farn
Attorney for Applicants
Registration No. 41,015

Fenwick & West LLP
Silicon Valley Center
801 California Street
Mountain View, CA 94041
(650) 335-7823 (Tel)
(650) 938-5200 (Fax)